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10/712,756

11/12/2003

John T. Matthews

2003

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7590

05/10/2006

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EXAMINER

AYRES, TIMOTHY MICHAEL

ART UNIT

PAPER NUMBER

3637

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,756

Applicant(s)

MATTHEWS ET AL.

Examiner

Timothy M. Ayres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 17-22 and 24-36 is/are pending in the application.
- 4a) Of the above claim(s) 10, 11, 19-21 and 32-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-14, 22, 24-31, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species 1 in the reply filed on 3/09/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Currently only claims 22, 24-30, 35, and 36 read on the elected species 1. Even though claims 1-9, 12-14, 17, 18, and 31 are drawn to a non-elected species they are not withdrawn since species 5 (figs 27-29) was originally examined and subsequently the election is considered to be species 1 and 5. Claims drawn to those species of figures 1-17 and 27-29 will be examined and therefore claims 1-9, 12-14, 17, 18, 22, 24-31, 35, and 36 are considered below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

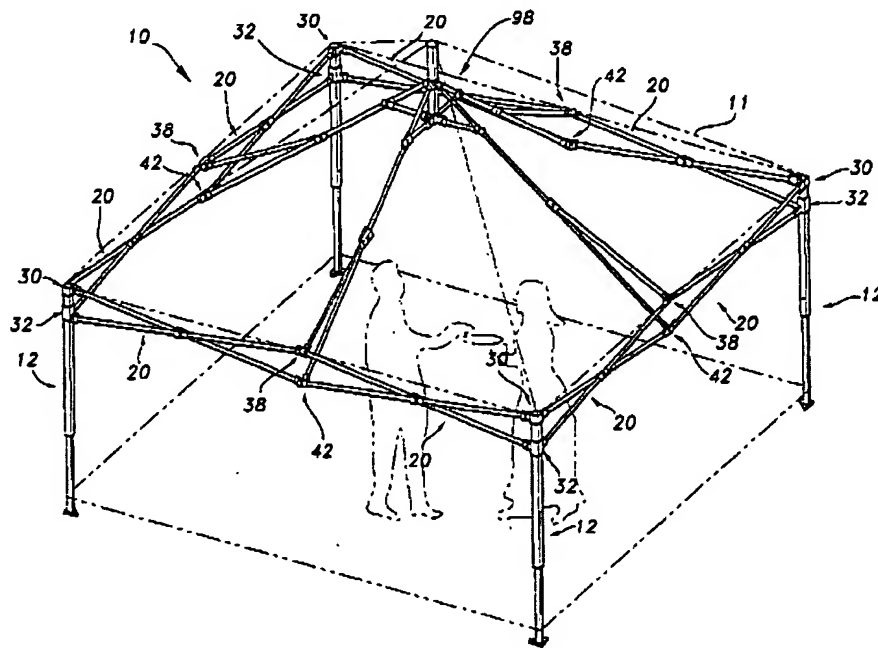
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 22, 24-26, 30, 35, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication 2004/0084074 to Chiu. Chiu '074 discloses an expandable framework (10) adapted to move between an expanded state for supporting a canopy covering (11) above a support surface as seen in figure 1 and a collapsed state for storage as seen in figure 9. The expandable framework has a plurality of upright support members (12) each having a bottom end portion (14) positionable on the support surface and a top end portion (16) opposite the bottom end (14). The support members (12) being oriented alongside one another in the collapsed state and spaced apart from one another when in the expanded state. Upper mounts (30) and lower mounts (32) are disposed on each corner support member (12), at least some of the upper (30) and lower (32) mounts including a lobe (54) having outwardly facing, spaced-apart and substantially parallel sidewalls as best seen in figure 3. A plurality of edge scissor assemblies (20,20) with there being an edge scissor assembly (20,20) interconnecting peripherally adjacent ones of the corner support member (12), each edge scissor assembly (20) including a pair of outer upper ends (24) and a pair of outer lower ends (22). The edge scissor assemblies (20,20) operative to open and close whereby the expandable framework may move between the expanded and collapsed states, at least some of the outer upper ends (24) and the outer lower ends (22) provided with a socket fitting (58) including spaced apart portions (78,76) that are spaced apart from one another to define a channel opening there between that is adapted to mateably engage a respective the lobe in close-fitted engagement, and with at least one of the portions having a substantially flat face thereby to form sliding

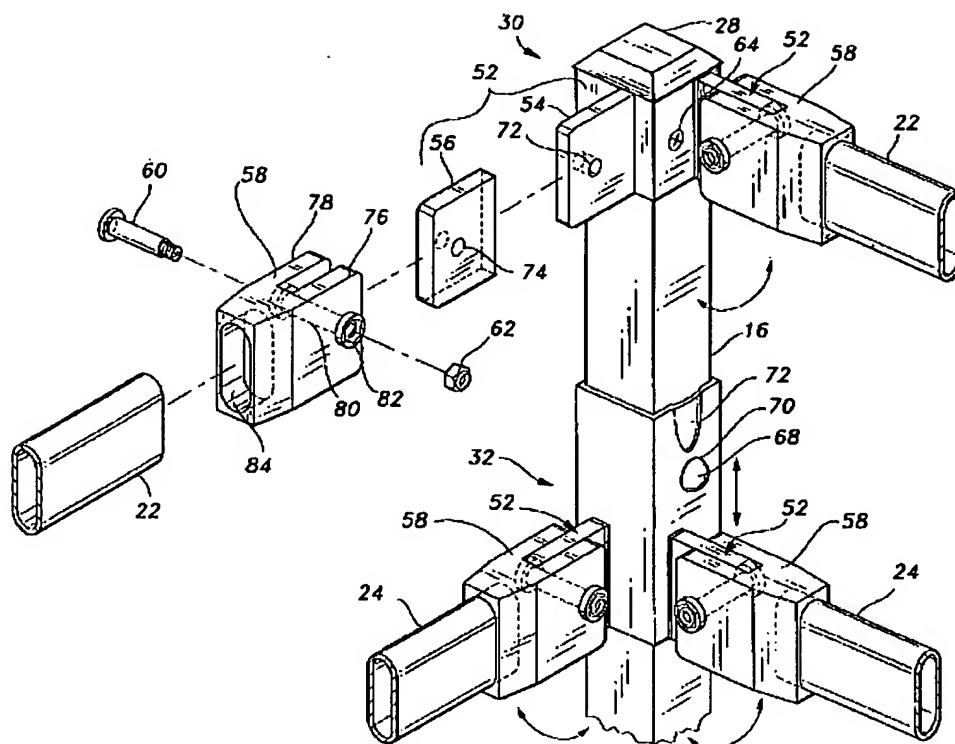
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contact surface with the respective the lobe (54). A fastener (60) to secure each lobe (54) for pivotal movement in the respective the socket fitting (58).



Chiu '074 Figure 1

5. The socket fittings (58) each include first (76) and second (78) arm portions extending for a length and having substantially parallel opposed face portions defining the channel opening, the first (76) and second (78) arm portion adapted to receive the respective the lobe (54) there between with each of the face portions forming sliding contact surfaces with the respective the lobe (54).



Chiu Figure 3

6. A pair of upper (30) and lower (32) mounts are disposed on each of the upright support members (12), one of the pair being a stationary mount (30) and another of the pair being a slide mount (32) slideably secured to the upright support member (12) and movable there along between locations proximate to and remote from the stationary mount (30) when the respective the edge scissor assembly (20,20) opens and closes.
7. The upper mount (30) in each pair is the stationary mount (30).
8. A latch element (68) associated with each of the upright support members (12), the latch (68) operative to latch the respective slide mount (32) in the location proximate to the respective stationary mount (30).

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9. A roof support assembly (98) supported above the support surface by the upright support members (12) when in the expanded state, the roof support assembly operative to support the canopy covering (11).

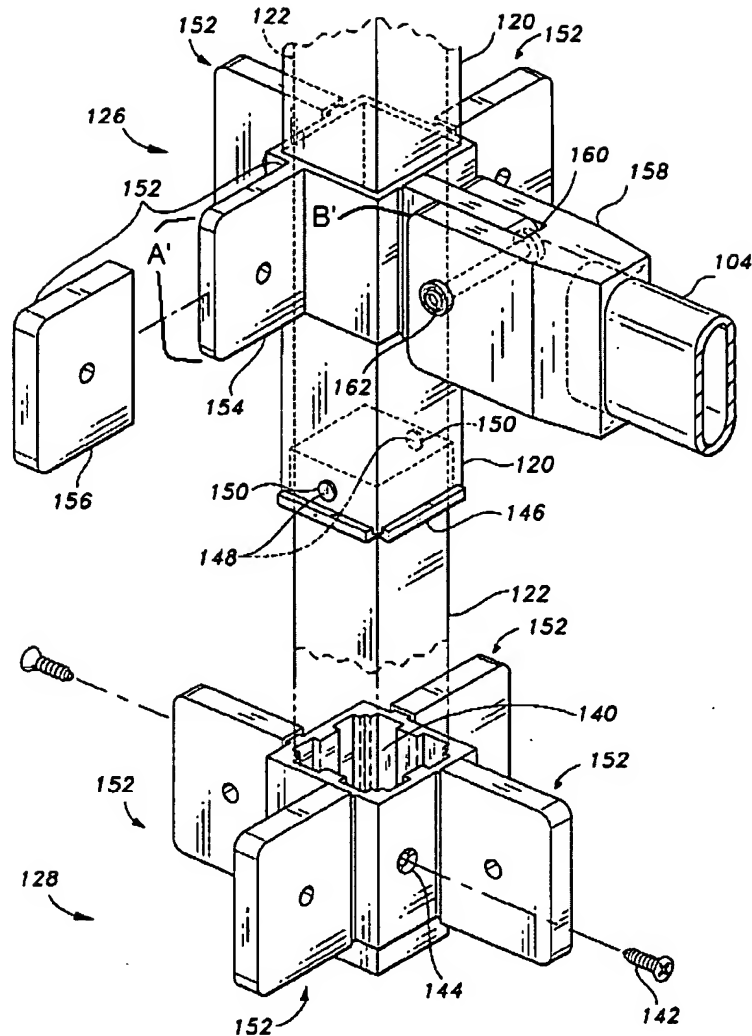
10. The roof support assembly (98) includes a plurality of roof support members (104) pivotally connected to one another at proximate ends (126) thereof to form an apex (100).

11. Regarding claim 30, the edge scissor assembly (20,20) includes a pair of scissor units (20) connected at upper (38) and lower (42) inner ends thereof in end-to-end relation.

12. Regarding claim 35, the edge scissor assemblies (20,20) are constructed by at least one scissor unit (20), which includes a pair of scissor bars (22,24) pivotally connected to one another. The scissor bars (24,26) are tubular member having a cross-section selected from a group consisting of ovals, circles, squares and rectangles. In Chiu '074 an oval cross-section is disclosed as best seen in fig. 3, 7, and 8.

13. Regarding claim 36, At least one side panel is part of the canopy covering (11) is adapted to be supported by the framework (10) as shown and dot-dash lines in figure 1.

14. As best seen in figure 3 and marked up figure 8 below, the arm portions (78,76) and the lobes (154,54) have rounded corners (A', B') thus giving them rounded ends.



Chiu Figure 8

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

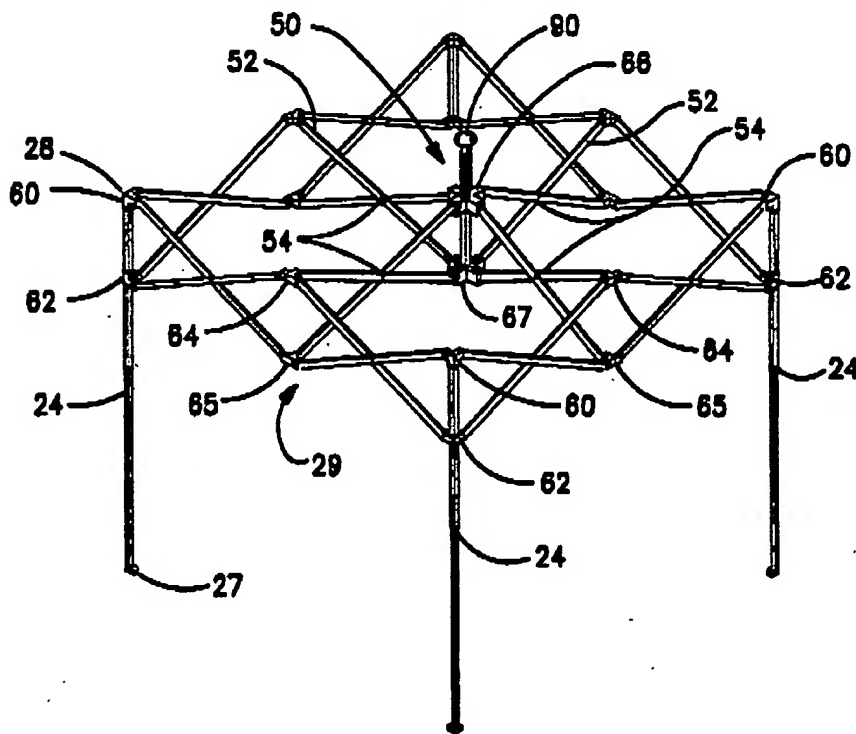
16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 1-9, 12-14, 17, 18, 22, 24-31, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,244,001 to Lynch in view of U.S. Patent 2,723,673 to Call and US Patent 5,701,923 to Losi. Lynch '001 discloses three embodiments corresponding to figures 2a, 2b, and 22a that include an expandable framework (11,21) adapted to move between an expanded state for supporting a canopy covering (12,22) above a support surface as seen in figure 1 and 2 and a collapsed state for storage as seen in figure 17. The expandable framework has a plurality of upright support members (14,24,430) each having a bottom end portion (27) positionable on the support surface and a top end portion (18,28) opposite the bottom end (27). The support members (14,24) being oriented alongside one another in the collapsed state and spaced apart from one another when in the expanded state. Upper mounts (60,420) and lower mounts (62,422) are disposed on each corner support member (14,24,430). A plurality of edge scissor assemblies (19,29) with there being an edge scissor assembly (19,29) interconnecting peripherally adjacent ones of the corner support member (14,24,430), each edge scissor assembly (19,29) including a pair of

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outer upper ends (44,44') and a pair of outer lower ends (45,45'). The edge scissor assemblies (19,29) operative to open and close whereby the expandable framework may move between the expanded and collapsed states. Lynch '001 discloses the mounts (60,62) with a pair arm portions (116,118) that create a channel opening (120). The two sides (121,122) have a substantially flat face to receive the scissor bars (41,42). The arm portions (116, 118) and the channel opening create a socket type fitting where the scissor bars (41, 42) fit between the two arm portions (116,118). A fastener (140) secures the ends of the scissor bars (41,42) to the arm portions (116,118) of the mounts for pivotal movement. The end of the scissor bars are rounded.



Lynch '001 Figure 2b

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18. Regarding claims 6 and 22, a roof support assembly (50,400) supported above the support surface by the upright support members (24,430) when in the expanded state, the roof support assembly operative to support the canopy covering (22).

19. Regarding claims 3 and 24, a pair of upper (60,420) and lower (62,422) mounts are disposed on each of the upright support members (14,24,430), one of the pair being a stationary mount (60,420) and another of the pair being a slide mount (62,422) slideably secured to the upright support member (14,24,430) and movable therealong between locations proximate to and remote from the stationary mount (60,420) when the respective the edge scissor assembly (19,29) opens and closes.

20. Regarding claims 4 and 25, the upper mount (60,420) in each pair is the stationary mount (62,422).

21. Regarding claims 5 and 26, a latch element (13) associated with each of the upright support members (14,24,430), the latch (13) operative to latch the respective slide mount (62,422) in the location proximate to the respective stationary mount (60,420).

22. Regarding claims 7 and 27, The roof support assembly (400) includes a plurality of roof support members (402) pivotally connected to one another at proximate ends thereof to form an apex (401) and extending generally radially outwardly from one another when in the expanded state, each roof support member pivotally connected at a distal end (410) thereof to one of the mounts (420,422) on a respective upright support member (430).

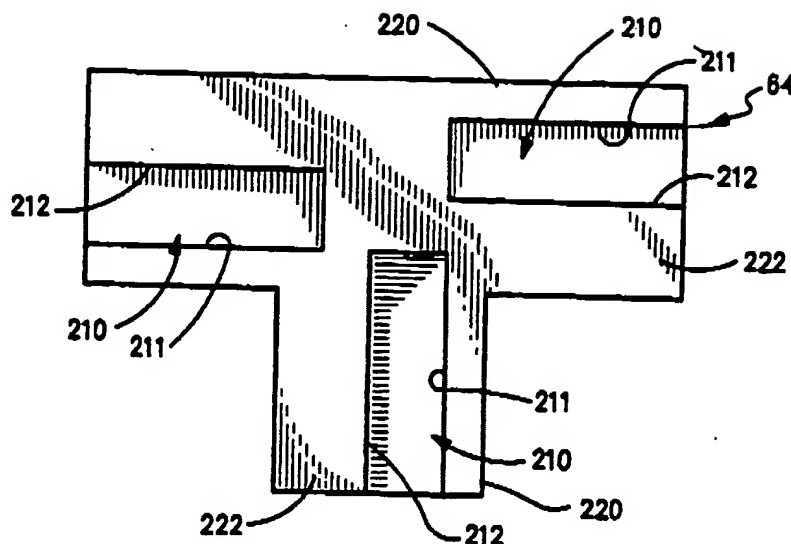
26. Regarding claims 14 and 29, in the embodiment in figure 2b, the roof support assembly (50) includes at least one central scissor assembly (52).

27. Regarding claims 15 and 30, the edge scissor assembly (29) includes a pair of scissor units (40) connected at upper (48) and lower (49) inner ends thereof in end-to-end relation as best shown in figure 4b.

28. Regarding claim 17, the edge scissor assemblies (29) are constructed by at least one scissor unit (40), which includes a pair of scissor bars (41,42) pivotally connected to one another.

29. Regarding claim 18, the scissor bars (41,42) are tubular member having a cross-section selected from a group consisting of ovals, circles, squares and rectangles. In Lynch '001 the bars (41,42) are of a rectangular cross section as seen in figure 5.

30. Lynch '001 teaches center fittings (64,65) that connect the ends of the scissor units together. The channels (210) that receive the ends of the scissor bars are offset as seen in figure 13 below.



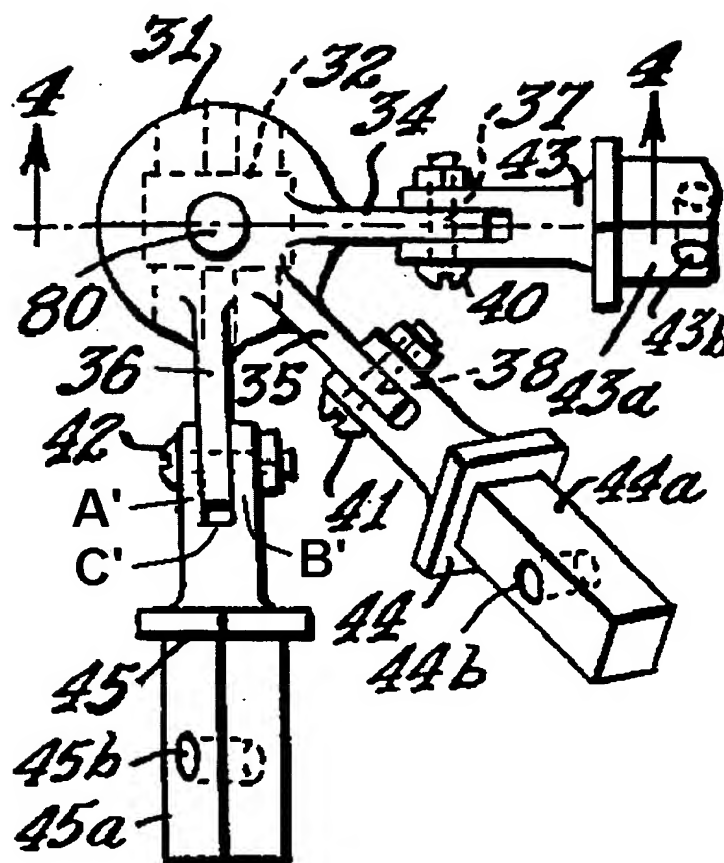
Lynch '001 Figure 13

31. Lynch '001 does disclose a socket fitting on the mounts, but does not expressly disclose the reverse of a lobe on the mounts with a corresponding socket on the scissor bars. Lynch '001 does not also expressly disclose the roof support members being pivotally secured to an apex cap.

32. Call '673 teaches a framework to receive a canopy. Mounts (31) are attached to upright support members (16). The mounts (31) include three lobes (34,35,36) corresponding to three sockets (43,44,45) that connect to the support members (12,13,14). Using socket (45) and lobe (36) as an example for all, the socket fitting (45) includes a first (A') and second (B') arm portions extending for a length and having substantially parallel opposed face portions defining the channel opening (C'), the first (A') and second (B') arm portion adapted to receive the respective the lobe (36) there between with each of the face portions forming sliding contact surfaces with the

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respective the lobe (36). The ends of the lobes and arm portions of the socket are rounded.



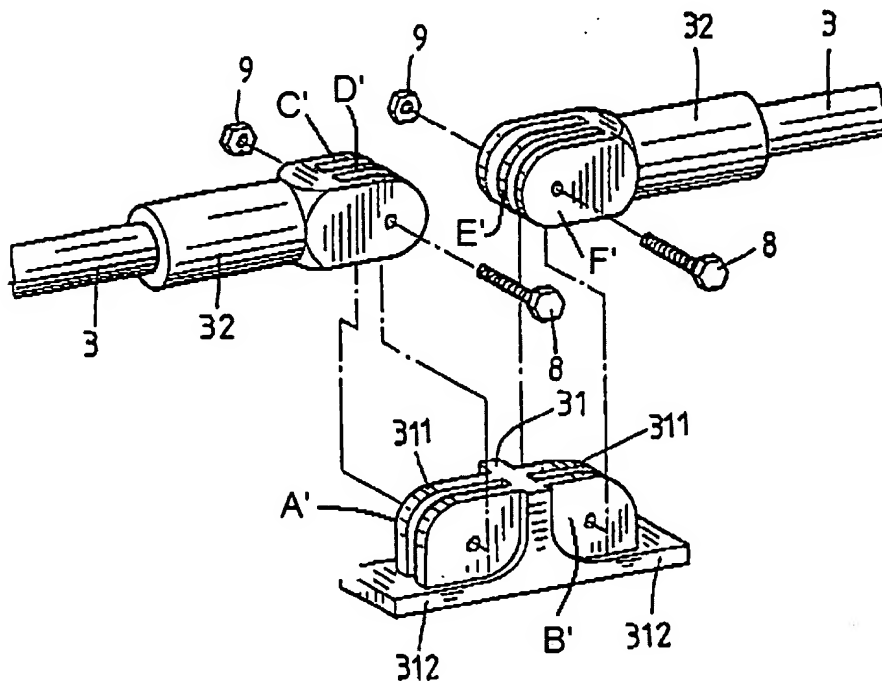
Call '673 Figure 3

33. The roof support members (14) are pivotally secured to an apex cap (50).

35. Lynch '001 in view of Call does not expressly disclose A female cavity in the socket to receive the ends of the scissor bars and center fittings in between scissor units that have longitudinal offset lobes to be received in channel openings of sockets on the end of the scissor bars.

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36. Losi teaches an expandable frame work that has a joint with a center fitting (31) with Lobes (A', B') that are longitudinal offset from each other as seen in marked up figure 7 below. Spaced apart arm portions (C', D', E', F') on sockets (32) create channels to receive Lobes (A', B'). The sockets (32) have a female cavity to receive the bars (3). At the time of the invention it would have been obvious to modify the center fittings of Lynch '001 in view of Call by using the lobe and socket structure of Losi to provide less laterally movement due to the increased surface area of the connections.



Losi '923 Figure 7

37. Claims 22, 24-31, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,244,001 to Lynch in view of U.S. Patent 2,723,673 to Call and U.S. Patent 5,884,647 to Dwek. Lynch '001 discloses three embodiments

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corresponding to figures 2a, 2b, and 22a that include an expandable framework (11,21) adapted to move between an expanded state for supporting a canopy covering (12,22) above a support surface as seen in figure 1 and 2 and a collapsed state for storage as seen in figure 17. The expandable framework has a plurality of upright support members (14,24,430) each having a bottom end portion (27) positionable on the support surface and a top end portion (18,28) opposite the bottom end (27). The support members (14,24) being oriented alongside one another in the collapsed state and spaced apart from one another when in the expanded state. Upper mounts (60,420) and lower mounts (62,422) are disposed on each corner support member (14,24,430). A plurality of edge scissor assemblies (19,29) with there being an edge scissor assembly (19,29) interconnecting peripherally adjacent ones of the corner support member (14,24,430), each edge scissor assembly (19,29) including a pair of outer upper ends (44,44') and a pair of outer lower ends (45,45'). The edge scissor assemblies (19,29) operative to open and close whereby the expandable framework may move between the expanded and collapsed states. Lynch '001 discloses the mounts (60,62) with a pair arm portions (116,118) that create a channel opening (120). The two sides (121,122) have a substantially flat face to receive the scissor bars (41,42). The arm portions (116, 118) and the channel opening create a socket type fitting where the scissor bars (41, 42) fit between the two arm portions (116,118). A fastener (140) secures the ends of the scissor bars (41,42) to the arm portions (116,118) of the mounts for pivotal movement. The ends of the scissor bars are rounded.

38. Regarding claim 22, a roof support assembly (50,400) supported above the support surface by the upright support members (24,430) when in the expanded state, the roof support assembly operative to support the canopy covering (22).

39. Regarding claims 24, a pair of upper (60,420) and lower (62,422) mounts are disposed on each of the upright support members (14,24,430), one of the pair being a stationary mount (60,420) and another of the pair being a slide mount (62,422) slideably secured to the upright support member (14,24,430) and movable there along between locations proximate to and remote from the stationary mount (60,420) when the respective the edge scissor assembly (19,29) opens and closes.

40. Regarding claim 25, the upper mount (60,420) in each pair is the stationary mount (62,422).

41. Regarding claim 26, a latch element (13) associated with each of the upright support members (14,24,430), the latch (13) operative to latch the respective slide mount (62,422) in the location proximate to the respective stationary mount (60,420).

42. Regarding claim 27, The roof support assembly (400) includes a plurality of roof support members (402) pivotally connected to one another at proximate ends thereof to form an apex (401) and extending generally radially outwardly from one another when in the expanded state, each roof support member pivotally connected at a distal end (410) thereof to one of the mounts (420,422) on a respective upright support member (430).

43. Regarding claim 28, the roof support members (402) includes a pair of extendable sections (404,406) movable between a retracted state when the framework

structure is in the collapsed state and an extended state when the framework structure is in the expanded state.

44. Regarding claim 9, the roof support member includes a roof latch element (408) associated therewith operative to retain the extendable sections thereof in the extended state.

45. Regarding claim 13, the roof support member (402) includes a cantilever section (412) pivotally connected at a first cantilever end (414) to the roof support member and at a second cantilever end to the slide mount (422) on the respective upright support member (430).

46. Regarding claim 29, in the embodiment in figure 2b, the roof support assembly (50) includes at least one central scissor assembly (52).

47. Regarding claim 30, the edge scissor assembly (29) includes a pair of scissor units (40) connected at upper (48) and lower (49) inner ends thereof in end-to-end relation as best shown in figure 4b.

48. Regarding claim 17, the edge scissor assemblies (29) are constructed by at least one scissor unit (40), which includes a pair of scissor bars (41,42) pivotally connected to one another.

49. Regarding claim 18, the scissor bars (41,42) are tubular member having a cross-section selected from a group consisting of ovals, circles, squares and rectangles. In lynch '001 the bars (41,42) are of a rectangular cross section as seen in figure 5.

50. Lynch '001 does disclose a socket fitting on the mounts, but does not expressly disclose the reverse of a lobe on the mounts with a corresponding socket on the scissor

bars. Lynch '001 does not also expressly disclose the roof support members being pivotally secured to an apex cap.

51. Call '673 discloses a framework to receive a canopy. Mounts (31) are attached to upright support members (16). The mounts (31) include three lobes (34,35,36) corresponding to three sockets (43,44,45) that connect to the support members (12,13,14). Using socket (45) and lobe (36) as an example for all, the socket fitting (45) includes a first (A') and second (B') arm portions extending for a length and having substantially parallel opposed face portions defining the channel opening (C'), the first (A') and second (B') arm portion adapted to receive the respective the lobe (36) there between with each of the face portions forming sliding contact surfaces with the respective the lobe (36). The edges of the lobes and arm portions are rounded.

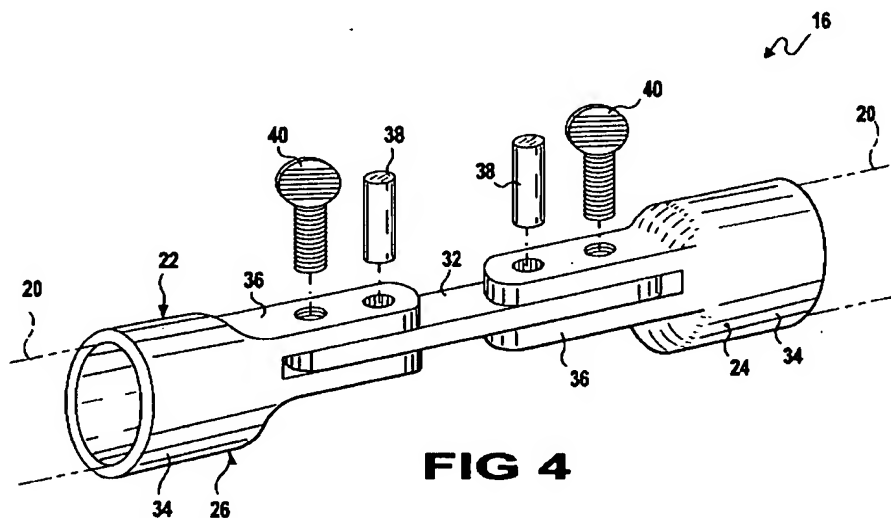
52. The roof support members (14) are pivotally secured to an apex cap (50).

53. At the time of the invention it would have been obvious for a person of ordinary skill in the art to take the framework of Lynch and use the teaching of Call to reverse fittings and put the lobes on the mounts and a socket fitting on the scissor bars to make the structure more stable. Also, it would have been obvious to add the apex of Call to make the structure lighter since the apex structure would be one piece.

54. Lynch '001 in view of Call does not disclose expressly a center fitting interconnecting with sockets on the corresponding scissor bars, a female cavity for receiving an end of the scissor bar, the bars as ovals, and a side panel to be supported by the framework. Dwek '647 teaches a collapsible framework (16) with tubular bars (20) in shape of an oval. Attached on the end of the bars is a socket fitting (34) which is

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connected to a center fitting (32). The socket fitting (34) has a female cavity to receive the end of the bars (20) as seen in figure 4. The sockets (34) have arms (36) that define a channel in the space between them that is to receive the center fitting (32). A side panel (70) is attached to the frame work (16). At the time of the invention it would have been obvious for a person of ordinary skill in the art to take the frame work of Lynch in view of Call and use the center fitting, sockets with female cavities, side wall, and tubular bars of Dwek since they make the structure simple and easy to use. The edges of the lobes and arm portions are rounded.

**FIG 4**

Dwek Figure 4

Response to Arguments

55. Applicant's arguments with respect to claims 1 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

56. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Ayres whose telephone number is (571) 272-8299. The examiner can normally be reached on MON-THU 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TMA
5/02/06



JANET M. WILKENS
PRIMARY EXAMINER
Art 3637